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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,111	11/17/2003	Shoji Inagaki	116928	9777
25944	7590	03/31/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			ARTHUR JEANGLAUD, GERTRUDE	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,111

Applicant(s)

INAGAKI, SHOJI

Examiner

Gertrude Arthur-Jeanglaude

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. (U.S. Patent No. 5,924,510) in view of Toyoda et al. (U.S. Patent No. 5,376,868).

As to claims 1, 9, 16, Itoh et al. disclose a vehicle behavior control system comprising a controller (See abstract) that obtains a normal vehicle state value based on an operation amount of a vehicle operating member performed by a vehicle operator, (See col. 7, lines 33-41) and obtains an actual vehicle state value (See col. 8, lines 9-17) and controls a vehicle behavior based on an-the actual vehicle state value and the normal vehicle state value, Itoh et al. discloses stabilizing the vehicle behavior and also discloses subtracting wheels (see col. 7, lines 41-46); therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Itoh et al. by correcting with respect to the vehicle operating member and obtains the normal vehicle state value based on the estimated amount of correction and an actual operation amount (See col. 8, lines 9-17) since it would allow the transmission of the driving force.. However, in an analogous art, Toyoda et al. disclose a controller

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estimates an amount of correction with respect to the vehicle operating member by the vehicle operator, and obtains the normal vehicle state value based on the estimated amount of correction and an actual operation amount (See abstract; col. 4, lines 12-15; col. 6, lines 13-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Itoh et al. with that of Toyoda et al. by having a controller for correcting with respect to the vehicle operating member by the vehicle operator since it would allow better distribution for driving force among the wheels.

As to claims 2-4, Itoh et al. disclose the controller obtains a corrected operation amount by subtracting the estimated amount of correction from the actual operation amount, and obtains the normal vehicle state value based on the corrected operation amount wherein the controller estimates the vehicle behavior based on the actual vehicle state value and the normal vehicle state value, obtaining an estimated results and controls the vehicle behavior based on the estimated result; and the controller obtains the normal vehicle state value based on the amount of operation with respect to the vehicle operating member performed by the vehicle operator, and controls the vehicle behavior by controlling an actuator of the vehicle in accordance with a control value that brings the actual vehicle state value into the normal vehicle state value (see col. 7, lines 41-46);

As to claims 5-8, 10-15, 17-20 Itoh et al. disclose the controller controls the vehicle behavior by controlling a braking force to be applied to each of the wheels; and the vehicle operating member is a steering member of the vehicle, the operation amount is

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an amount of operating the steering member, and the amount of correction is a corrected amount of operating the steering member; and the controller estimates an excess yaw moment acting on the vehicle, which is caused by a characteristic of a road surface on which a braking operation is applied to the vehicle, and estimates the corrected amount of operating the steering member based on the estimated excess yaw moment; and wherein the controller determines whether the vehicle is running on the road surface having a characteristic of uneven friction coefficient during the braking operation, and estimates the excess yaw moment based on a target braking force to be applied to each wheel of the vehicle for stable braking operation on the assumption that the road surface has uniform friction coefficient, and estimates a braking force to be applied to each wheel of the vehicle, if it is determined that the braking operation is applied to the vehicle running on the road surface with the uneven friction coefficient. (See abstract; Fig.2). In Fig. 2, yaw rate and brake operation are applied to the vehicle and wheels of the vehicle (See Fig.4; col. 4, lines 18-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Itoh et al. with that of Toyoda et al. by having a controller for correcting with respect to the vehicle operating member by the vehicle operator since it would allow better distribution for driving force among the wheels.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (571) 272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ



March 22, 2006


GERTRUDE A. JEANGLAUDE
PRIMARY EXAMINER